# COASTAL IMPACT ASSISTANCE PROGRAM (CIAP) PROJECT NOMINEE FACT SHEET

#### 1). Project Title:

Whiskey Island Back Barrier Marsh Creation

#### 2). Entity/Individual Nominating Project:

Terrebonne Parish Consolidated Government

#### 3). Contact Information:

Mr. Al Levron
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#### 4). Total State CIAP Funds Requested:

Total CIAP Funds Requested: \$21.8 million

### 5). Infrastructure Funds Proposed:

There are \$0 infrastructure funds proposed for this project.

# 6). Description and Location of Project:

Whiskey Island, is one of five islands that make up the Isles Dernieres barrier island chain The proposed project is in the Terrebonne Basin of CWPPRA Region 3, Terrebonne Parish, approximately 18 miles southwest of Cocodrie, Louisiana. The island is surrounded by Coupe Colin to the west, Whiskey Pass to the east, Lake Pelto, Caillou Boca and Caillou Bay to the north, and the Gulf of Mexico to the south.

# 7). Project Type: 1, 2 & 4

This project, a Barrier Island Restoration and Marsh Creation Project, is presented for the conservation, restoration and protection of coastal areas; to mitigate damage to fish, wildlife and natural resources; and the implementation of a marine, coastal or comprehensive conservation management plan. Specifically, Action Plan EM-5 (Preservation and Restoration of Barrier Islands) of the Barataria-Terrebonne National Estuary Program (BTNEP).

# 8). Project Justification:

Gulfside and bayside erosion has resulted in the narrowing of Whiskey Island, as well as the entire Isles Dernieres chain. The migration of the two shorelines toward each other has resulted in an average decrease in width of 68% for the Isles Dernieres. Within 100 years, the entire subaerial portion of the Isles Dernieres barrier island system is expected to disappear except for small land fragments associated with the western end of Whiskey Island and the eastern end of East Island. Some estimates, however, project that the Isles Dernieres will disappear as early as 2017. Still other projections suggest that without restoration, the island will become subaqueous sand shoals between 2007 and 2019.

The goal of this project is to increase the longevity of the previously restored and natural portions of the island by increasing the island's width. Increasing the island's width will help to retain sand volume as well as elevation. Approximately 300 acres of intertidal, back barrier marsh will be created by semiconfined disposal and placement of dredged material. This material is expected to come from a sediment source near the island.

This project was presented at the CWPPRA PPL 13 (TE-50) planning round and was selected for Phase I, (Engineering and Design) funding. Phase I should be complete by the end of 2006, or early in 2007.

# **Preliminary Project Benefits**

- 1) This project will enhance the structural function of the island. In addition, approximately 330 acres of intertidal, back barrier marsh will be created by semiconfined disposal and placement of dredged material. This material is expected to come from a sediment source near the island.
- 2) A minimum of six 1- acre tidal ponds and 10,000 feet of tidal creeks will be constructed. The area will be planted with smooth cord grass (Spartina Alterniflora), a native marsh plant valued for its ability to colonize and protect fragile marsh soil.
- 3) This project will provide no direct benefits to critical or non-critical infrastructure; however, "There's no question that these buffers (barrier islands and coastal wetlands) are the first line of defense against a storm. It's estimated that every mile or two of wetlands reduces storm surge by about a foot. So when we talk about creating protection equal to conditions before Katrina, we must include wetland and barrier island restoration." Robert Dalrymple, Watermarks, Number 30, March 2006.
- 4) This project will complement and provide synergistic restoration benefits to another CWPPRA restoration project, the Whisky Island Restoration (TE-27). This project, which included dredging and placement of material, vegetative planting and sand fencing, was completed in June 2000.

# **Preliminary Estimated Construction Costs:**

## Coast 2050 Strategy:

This project was nominated and developed under the CWPPRA PPL Number 13. Phase II (construction) funding was requested in December, 2005, but the project was not selected. This project meets the following Coast 2050 strategy:

Restoring/maintaining barrier islands.

In addition, the project also meets the restoration goals identified by the Strategic Plan for Coastal Restoration adopted by the Terrebonne Parish Coastal Zone Management and Restoration Advisory Committee and supported by the Terrebonne Parish Council and meets the goals and objectives of the specified actions plans of the BTNEP.

#### 9). Project Cost Share:

The project cost share is unknown at this time.

#### Attachments

1. CWPPRA Project Nomination Fact Sheet - EPA

June 2004



# Whiskey Island Back Barrier Marsh Creation (TE-50)

#### **Project Status**

Approved Date: 2004 Project Area: 1,038 acres
Approved Funds: \$2.8 M Total Est. Cost: \$21.8 M

Net Benefit After 20 Years: 272 acres

Status: Engineering and Design

Project Type: Barrier Island Restoration/Marsh Creation

#### Location

Whiskey Island, which is one of five islands that make up the Isles Dernieres barrier island chain, is located 18 miles southwest of Cocodrie in Terrebonne Parish, Louisiana. The island is surrounded by Coupe Colin to the west, Whiskey Pass to the east, Lake Pelto, Caillou Boca, and Caillou Bay to the north, and the Gulf of Mexico to the south.

#### Problems

Gulfside and bayside erosion has resulted in the narrowing of Whiskey Island (and the entire Isles Dernieres chain) as the two shorelines migrate toward each other, resulting in a 68% decrease in average width for the Isles Dernieres. Within 100 years, the entire subaerial portion of the Isles Dernieres barrier island system is expected to disappear except for small land fragments associated with the western end of Whiskey Island and the eastern end of East Island; however, with some estimates, the Isles Dernieres are projected to disappear much earlier, in 2017. Other predictions suggest that, without restoration, the island will become subaqueous sand shoals between 2007 and 2019.

Another CWPPRA restoration project, Whiskey Island Restoration (TE-27) - which included dredging and placement of dredge material, vegetative planting, and sand fencing - was completed there in June 2000.



In this aerial view of Whiskey Island facing north, the island's Gulf of Mexico shoreline, as well as its back barrier marsh, is visible.

#### Restoration Strategy

The goal of this project is to increase the longevity of the previously restored and natural portions of the island by increasing the island's width. Increasing the island's width will help to retain sand volume and elevation. Approximately 300 acres of intertidal, back barrier marsh will be created by semiconfined disposal and placement of dredged material. The dredged material is expected to come from a sediment source near the island. A minimum of six 1-acre tidal ponds and 10,000 feet of tidal creeks will be constructed. The area will be planted with smooth cordgrass (*Spartina alterniflora*), a native marsh plant valued for its ability to colonize and protect fragile marsh soil.

#### Progress to Date

The Louisiana Coastal Wetlands Conservation and Restoration Task Force approved funding for engineering and design at the January 2004 Task Force meeting.

This project is on Priority Project List 13.

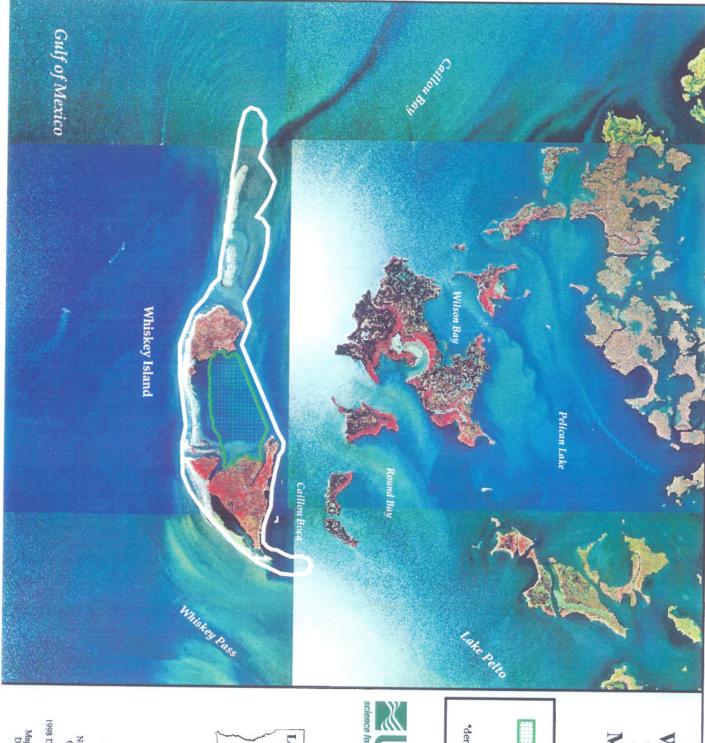
For more project information, please contact:



Federal Sponsor: U.S. Environmental Protection Agency Dallas, TX (214) 665-6722



Local Sponsor: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



# Marsh Creation Whiskey Island **Back Barrier** (TE-50)



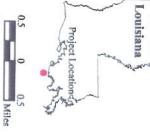
Marsh Creation\*

**Project Boundary** 

\*denotes proposed features







Kilometers

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle
Map Date: January 30, 2004
Map ID: USGS-NWRC 2004-11-0140
Data accurate as of: July 20, 2004